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GRC Environmental Programs Manual—Chapter 19

Drinking Water Program

Approved by: Energy and Environmental Management Office Chief

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NASA - Glenn Research Center
Cleveland, OH 44135

Change Record

Rev.	Effective Date	Expiration Date	C-25, Change Request #	Description
A	4/2015	4/2020		3.0 Added "30 CFR 141.3" 5.2 Changed SHeD's responsibilities to "SHeD shall assist Code FE and FD on an as needed basis to verify the GRC drinking water program complies with OSHA regulations" 5.3 .1 Systems Repairs "FD responds to and performs all repairs to the water distribution system" changed to "Code FD (LF) or Code H (PBS) respond to and performs all repairs to the water distribution systems at GRC." 5.3.2 Water Quality Changed to "5.3.2 Water Quality at LF Upon notification of employee concerns with the water quality at LF, the initial response is the source is tagged out of service. Sampling is conducted by the FD contractor, appropriately as stated by the laboratory testing facility, and sent to the approved testing facility for analysis. A list of approved testing facilities can be located at: http://epa.ohio.gov/ddagw/labcert.aspx and clicking on the "currently certified laboratories" link" Added 5.3.3 "Water Quality at PBS Upon notification of employee concerns with the water quality at PBS, the initial response is to tag the source out of service. Sampling is conducted by the Code H contractor, in accordance with the approved laboratory testing facility directions, and then sent to the approved testing facility for analysis. Code H is the steward for all records involving quality testing conducted at PBS." 5.3.3 The FD Building Manager is now section 5.3.4 and the responsibilities have been changed to "In situations where water quality is suspect as described in Section 5.3.2, the Building Manager is responsible for informing the FD Systems Manager, EEMO Drinking Water Program Manager, and building occupants of these quality concerns in a timely and efficient manner. The FD Building manager will then be responsible for placing notices on the suspected fixtures and then expediting the work order for sampling and testing by the code FD contractor. Building Manager will communicate these test results to the Systems Manager and the Drinking Water Program Manager. Once the Drinking Water Program Manager determines that the water is safe to drink, the Building Manager will inform the building occupants. " 5.4 Energy and Environmental Management Office Code (FE) responsibilities have been edited to include "• Monitoring the water quality as delivered to GRC by the City of Cleveland

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				Water Department and to PBS by the Erie County Water Division. • Acting as the interface between GRC and regulatory agencies. Code FE informs FD Systems Manager and drinking water users on the requirements to comply with regulations and the specific tests required when FD Contractor is sampling the water. • Establishing scope and frequency of recurring water quality sampling and testing for GRC systems. • Custodian of all analytical test results from annual samples and samples conducted due to quality concerns that pertain to the drinking water program at LF. Coordinator of Agency functional reviews of the Drinking Water Program." 7.1 Water Quality reports has been changed to "EEMO maintains all sampling and analysis Analytical Reports and Audit Records on the FE shared drive." Section "7.3 Drinking Water Program Audit Records Audit reports are maintained by the Safety and Health Division's Occupational Health Branch." has been removed C.1 LF Procedure has been edited to "Water quality is verified by annual sampling and testing. Drinking water shall be sampled and tested at specific end use fixtures on an annual basis. Each sample is analyzed for chlorine, turbidity, pH, iron, zinc, copper, lead, and fecal coliforms. Sampling locations are based on occupant density, with annual even year testing occurring at Building142, Building 21, Building 86, Building 77, Building 5, and Building 60 and odd year testing occurring at Building 6, Building 14, Building 54, Building 49, Building 301, Building 11, and Building 107. Three additional building will be tested each year, as determined by the EEMO. EEMO determines the location and number of fixtures to be sampled at random based on statistical analysis techniques. FD implements the annual water quality sampling, testing and analysis for the Drinking Water Program. The samples are collected at point of use fixtures across LF. Samples are collected by the maintenance contractor and delivered to a facility approved by the Ohio EPA Division of Environmental Services Laboratory Certification Section for testing and analyses. These results are delivered to FD and FE for record keeping. Samples that do not meet acceptable water quality standards require additional sampling and testing to determine the source of water quality issue." C.4 PBS Procedure Total Coliform Rule Analysis samples have been changed from "monthly" to "semi-annually"

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				• Changed all instances of "SHED" to reflect current organization of SHeD – Safety and Health Division • Updated appendix to reflect missing definitions

***Include all information for each revision. Do not remove old revision data. Add new rows to table when space runs out by pressing the tab key in the last row, far right column.*

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Chapter 19—Drinking Water Program

NOTE: This chapter is maintained and approved by the Energy and Environmental Management Office (EEMO). The last revision date of this chapter was March 2015. The current version is maintained on the Glenn Research Center internet at http://www.grc.nasa.gov/WWW/FTD/EEMO/index.html. Approved by: Chief of Energy and Environmental Management Office.

1.0 PURPOSE

This chapter establishes policies, procedures and practices to maintain acceptable potable water quality at the NASA Glenn Research Center's (GRC's) at Lewis Field (LF) and Plum Brook Station (PBS). This chapter supports GRC's environmental and occupational health policies, which promotes pollution prevention, regulatory compliance, continuous improvement and employee health.

2.0 APPLICABILITY

This chapter applies to all civil servant and contractor employees assigned to LF and PBS.

3.0 BACKGROUND

The quality of drinking water at GRC is highly important to the workforce. Potable water is supplied to LF by the City of Cleveland and to PBS by the Erie County Water Division.

Water quality information can be found on the web site for each supplier.

For Cleveland: www.clevelandwater.com

For Erie County: http://www.eriecounty.oh.gov

The Ohio Environmental Protection Agency's (EPA's) Division of Drinking and Ground Waters (DDAGW) ensures compliance with the federal Safe Drinking Water Act and evaluates potential threats to source waters that supply Ohio's more than 5,000 public drinking water systems. The web sites for both suppliers provide information on their respective water quality and that they meet Safe Drinking Water Act (SDWA) specifications. Therefore, under normal circumstances, the only potential sources for the introduction of contamination are assumed to be on NASA premises. Abnormal circumstances such as a supplier water main break in the immediate vicinity of LF or PBS may require additional disinfecting procedures or extended flushing after the repair to restore safe drinking water quality to the GRC systems.

Water quality parameters were established by the U.S. Environmental Protection Agency (USEPA) for both primary and secondary drinking water standards to control the level of contaminants in the Nation's drinking water. These are legally enforceable standards that apply to public systems. These standards are found in the "National Primary Drinking Water Regulations."

The SDWA was enacted in 1974. This law requires utilities such as the Cleveland Water Department and the Erie County Water Division to supply potable water that is safe for human consumption in compliance with the requirements of the Act. This obligation effectively ends at the water meters installed in the main supply lines entering NASA premises. Thereafter GRC is responsible for the stewardship of the water distribution system and continuation of water quality delivered by the local utility.

Other public laws and public health regulations also govern how potable water systems are to be operated and maintained. However, these do not apply to GRC by definition, as stated in:

40 CFR 141.3

This part shall apply to each public water system, unless the public water system meets all of the following conditions:

(a) Consists only of distribution and storage facilities (and does not have any collection and treatment facilities);

(b) Obtains all of its water from, but is not owned or operated by, a public water system to which such regulations apply:

(c) Does not sell water to any person; and

(d) Is not a carrier which conveys passengers in interstate commerce.

The relevant regulation followed on NASA premises is from OSHA regulations found in:

29 CFR 1910.141(a)(2)

Potable water means water that meets the standards for drinking purposes of the State or local authority having jurisdiction, or water that meets the quality standards prescribed by the U.S. Environmental Protection Agency's National Primary Drinking Water Regulations (40 CFR 141).

29 CFR 1910.141(b)(1)(i) Potable water

Potable water shall be provided in all places of employment, for drinking, washing of the person, cooking, washing of foods, washing of cooking or eating utensils, washing of food preparation or processing premises, and personal service rooms.

4.0 POLICY

It is GRC policy to provide consistent water quality and protect drinking water sources from contamination during operation and maintenance of potable water in compliance with regulations.

This chapter describes the responsibilities, processes and requirements in order to promote consistency and protect drinking water sources during distribution, repair and system maintenance. To meet these requirements GRC complies with the most current version of the following codes, instructions, laws and standards: "Safe Drinking Water Act of 1974 including 1986 and 1996 amendments," "American Water Works Association (AWWA) standard c651," and the "disinfection of finished water storage facilities & water mains, OPR-05-002" from the Ohio EPA Operations Policy.

LF water quality is verified annually. Due to the configuration of the distribution system, PBS water quality is sampled and tested more frequently. Refer to Section **6.3**.

5.0 RESPONSIBILITIES

5.1 Users

Drinking water distribution is part of the infrastructure serving all of GRC. Its purpose is for human consumption. The drinking water system is not intended to provide cooling for equipment, test rigs, or other research activities.

5.1.1 Backflow Prevention

Users must avoid direct connections to fixture outlets to prevent water from an uncontrolled source back flowing into the drinking water distribution system. A backflow prevention device, typically a vacuum breaker, at the fixture or an air gap between the end of the connection (typically a hose) and the surface of the water level of the end use serve this purpose. For proper backflow prevention procedures, contact the Facilities Division System Management Branch. See Section **6.4.1**.

5.1.2 Contaminated Water Quality

Should users suspect contaminated water quality as evidenced by odor, taste, or turbidity, the facilities maintenance organization is contacted to initiate source tag out, sampling and testing work.

- LF sampling and testing of water quality under these circumstances is initiated by users requesting this work through the Building Manager or the Facilities Division Work Management Office (216-433-4948).
- PBS sampling and testing of water quality under these circumstances is accomplished by users requesting this work through the PBS Work Control Office (419-621-3336).

5.2 Safety and Health Division (SHeD)

SHeD shall assist Code FE and FD on an as needed basis to verify the GRC drinking water program complies with OSHA regulations.

5.3 Facilities Division (Code FD)

Facilities Division (FD) is responsible for the operation, maintenance and long-term stewardship of the drinking water distribution system for LF and PBS. System condition, integrity, and performance are overseen by a System Manager. Operation and maintenance functional responsibilities include: water quality sampling and analyses, tagging systems out of service, samples taken and tested, repairs, capital improvements, and conservation measures at LF.

5.3.1 System Repairs

Code FD (LF) or Code H (PBS) respond to and performs all repairs to the water distribution systems at GRC.

5.3.2 Water Quality at LF

Upon notification of employee concerns with the water quality at LF, the initial response is the source is tagged out of service. Sampling is conducted by the FD contractor, appropriately as stated by the laboratory testing facility, and sent to the approved testing facility for analysis. A list of approved testing facilities can be located at:

http://epa.ohio.gov/ddagw/labcert.aspx and clicking on the "currently certified laboratories" link

5.3.3 Water Quality at PBS

Upon notification of employee concerns with the water quality at PBS, the initial response is to tag the source out of service. Sampling is conducted by the Code H contractor, in accordance with the approved laboratory testing facility directions, and then sent to the approved testing facility for analysis. Code H is the steward for all records involving quality testing conducted at PBS.

5.3.4 The FD Building Manager at LF

In situations where water quality is suspect as described in Section **5.3.2**, the Building Manager is responsible for informing the FD Systems Manager, EEMO Drinking Water Program Manager, and building occupants of these quality concerns in a timely and efficient manner. The FD Building manager will then be responsible for placing notices on the suspected fixtures and then expediting the work order for sampling and testing by the code FD contractor. Building Manager will communicate these test results to the Systems Manager and the Drinking Water Program Manager. Once the Drinking Water Program Manager determines that the water is safe to drink, the Building Manager will inform the building occupants.

5.4 Energy and Environmental Management Office (Code FE)

Code FE is the steward of the Drinking Water Program. Code FE is responsible for:

- Monitoring the water quality as delivered to GRC by the City of Cleveland Water Department and to PBS by the Erie County Water Division.
- Acting as the interface between GRC and regulatory agencies. Code FE informs FD Systems Manager and drinking water users on the requirements to comply with regulations and the specific tests required when FD Contractor is sampling the water.
- Establishing scope and frequency of recurring water quality sampling and testing for GRC systems.
- Custodian of all analytical test results from annual samples and samples conducted due to quality concerns that pertain to the drinking water program at LF. Coordinator of Agency functional reviews of the Drinking Water Program.

6.0 REQUIREMENTS

All personnel performing work on the drinking water system at GRC shall have a working knowledge of the following documents, procedures, and policies and shall follow with the requirements therein. If a conflict in procedure/policy arises between this chapter and local, State, or Federal Regulations, the most stringent requirements shall apply.

6.1 System Disinfection

Anytime the delivery system piping containment integrity is breeched (e.g., a water main break, new connection, etc.) the repair procedure must include disinfecting the system and testing to verify the water quality is safe once service has been restored, but before any consumption.

6.1.1 AWWA Standard C651

AWWA Standard C651 is the procedure required for disinfecting new and repaired water systems. AWWA Standards for disinfection of finished water storage facilities and water mains are referenced in rule 3745-83-01 of the Ohio Administrative Code.

6.1.2 Ohio Operations Policy

Ohio EPA Operations Policy OPR–05–002.—Disinfection of Finished Water Storage Facilities & Water Mains.

6.1.3 Disinfection Standards

Disinfection rules from Ohio Administrative Code:

- Minimum chlorine residual—OAC rule 3745-83-01 (C)(1): At least 0.2 mg/L free chlorine or 1 mg/L combined chlorine
- Maximum residual disinfectant level (MRDL)—OAC 3745-81-10(C): 4.0 mg/L total chlorine (as Cl_2)

6.2 Draining Drinking Water

6.2.1 Drain to Sanitary Sewer System

Drinking water must not be drained to any storm water sewer. Drinking water shall be drained to the sanitary sewer system, regardless of how it is used.

6.2.2 Storm Sewer Discharge Chlorine Limit

LF has limits for chlorine in its storm water discharge defined by the permit allowing LF to discharge storm water into the Rocky River. Therefore, provisions must be made to prevent the chlorinated drinking water used for system flushing new or repaired water mains from flowing into storm drains, or pretreating the water to remove the chlorine prior to drain.

6.3 Water Quality

Water quality at GRC is verified by a sampling and testing program. Samples are collected at end use points. Sampling procedures shall comply with Ohio Administrative Code. Sample testing shall be performed at a laboratory certified according to Ohio Administrative Code Chapter 3745-89, Lab Approval.

6.3.1 LF Sampling Schedule

Sampling at LF is performed annually. Refer to Appendix **C** for details.

6.3.2 PBS Sampling Schedule

The configuration of the drinking water distribution at PBS requires different sampling and testing procedures for assuring water quality. Refer to Appendix **C** for details.

6.3.2.1 Additional Requirements

PBS drinking fountains have been surveyed to ensure that any fountain does not contain a lead liner; no drinking fountains onsite contain a lead liner. A flushing device has been installed on many of the PBS fountains to help ensure better water quality.

6.3.3 Substandard Test Results

Test results not meeting standards require additional sampling and testing to determine the source of the contamination. Appropriate repairs are performed to restore safe water quality. Once the source is safe for employee consumption, water service is restored and appropriate personnel are notified of analytical results.

6.4 Codes, Laws, and Standards

The laws, codes, standards, and instructions relate to the safe operation and maintenance of drinking water systems at GRC. The latest versions of these publications/documents shall be followed. More information on relevant regulations is found in Appendix **B**.

6.4.1 Backflow Preventers

To assure compliance with 29 CFR 1910.141 (b) (1) (i) and 1910.141 (b) (2) (ii), FD requires the following for all domestic water services to all facilities at GRC: a reduced pressure backflow preventer shall be installed on both the potable and nonpotable supplies; a double check valve (as approved by the AHJ) shall be installed on all water based sprinkler system supplies.

7.0 RECORDS

7.1 Water Quality Reports and Drinking Water Program Audit Records

EEMO maintains all sampling and analysis Analytical Reports and Audit Records on the FE shared drive.

7.2 Maintenance Records

Maintenance records, repair records, and capital improvements are kept by the Facilities Division.

8.0 REFERENCES

Document number	Document Title
29 CFR part 1910	Occupational Safety and Health Standards
40 CFR part 141	National Primary Drinking Water Regulations
40 CFR part 142	National Primary Drinking Water Regulations Implementation
40 CFR part 143	National Secondary Drinking Water Regulations
AWWA Standard C651	Disinfecting Water Mains
OPR–05–002	Disinfection of Finished Water Storage Facilities & Water Mains
SDWA	Safe Drinking Water Act of 1974 and Its 1986 and 1996 Amendments

NOTE: See Appendix **B** for information and links to laws and regulations.

APPENDIX A.—ACRONYMS AND DEFINITIONS

American Water Works Association (AWWA)

Authority Having Jurisdiction (AHJ)

Backflow.—The flow through a cross-connection from a possible source of contamination back into the drinking water system. It occurs when a cross-connection is created and a pressure reversal, either as back-siphonage or backpressure, occurs in the water supply piping.

Chemical Sampling and Analysis Program (CSAP)

Code of Federal Regulations (CFR)

Cross-Connection.—Any physical connection created between a possible source of contamination and any drinking water system piping.

Environmental Protection Agency (EPA)

Glenn Research Center (GRC) Note: This is inclusive of Lewis Field and Plum Brook Station

Lewis Field (LF)

Milligrams of substance per liter of water (mg/L)

National Pollution Discharge Elimination System (NPDES)

National Primary Drinking Water Regulations (primary standards).—Legally enforceable standards that apply to public water systems. Primary standards protect drinking water quality by limiting the levels of specific contaminants that can adversely affect public health and are known or anticipated to occur in water.

National Secondary Drinking Water Regulations (secondary standards).—Non-enforceable guidelines regarding contaminants that may cause cosmetic effects or aesthetic effects (such as taste, odor, or color) in drinking water.

The EPA recommends secondary standards to water systems but does not require systems to comply.

Nephelometric turbidity units (NTU).—Turbidity is measured in NTU. The instrument used for measuring it is called nephelometer or turbidimeter, which measures the intensity of light scattered at 90° as a beam of light passes through a water sample.

Ohio Administrative Code (OAC)

pH.—A measure of acidity and alkalinity of a solution that is a number on a scale on which a value of 7 represents neutrality; lower numbers indicate increasing acidity and higher numbers, increasing alkalinity.

Plum Brook Station (PBS)

Safe Drinking Water Act (SDWA)

Safety and Health Division (SHeD)

Secondary Standards - The EPA recommends secondary standards to water systems but does not require systems to comply.

Threshold odor number (TON).—A value indicative of the maximum dilution, which can be made of a sample with its odor remaining detectable. A higher TON indicates a stronger odor.

United States Environmental Protection Agency (USEPA)

Water quality.—Determined by comparing the concentration of contaminants in the water with specifications set forth in the Safe Drinking Water Act (SDWA) and its 1986 and 1996 amendments.

APPENDIX B.—SUMMARY OF REGULATIONS AND REQUIREMENTS

B.1 Safe Drinking Water Act of 1974 and Its 1986 and 1996 Amendments

This law protects the public health by authorizing the United States Environmental Protection Agency (USEPA) to set national health-based standards for drinking water to protect against both naturally occurring and manmade contaminants that may be found in drinking water. The 1996 amendments greatly enhanced the existing law by establishing an approach that ensures the quality of drinking water by protecting it from source to tap.

The text of the SDWA can be found at this link:
http://www.epw.senate.gov/sdwa.pdf

EPA PRIMARY STANDARD List of contaminants can be found at this link:
http://water.epa.gov/drink/contaminants/index.cfm#List

Ohio EPA SECONDARY Contaminant STANDARD can be found at this link:
http://codes.ohio.gov/oac/3745-82-02

B.2 OSHA Requirements

Note: The citation is included for reference and the text may not be the current version. The complete, current version of these requirements can be found at this link:
http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9790

Abridged, unofficial text included for reference only.

B.2.1 29 CFR 1910 OSHA General Industry

1910.141(a)(1)

Scope. This section applies to permanent places of employment.

1910.141(a)(2)

Definitions applicable to this section:

Potable water means water that meets the standards for drinking purposes of the State or local authority having jurisdiction, or water that meets the quality standards prescribed by the U.S. Environmental Protection Agency's National Primary Drinking Water Regulations (40 CFR 141).

1910.141(b) Water supply.

1910.141(b)(1) Potable water.

1910.141(b)(1)(i)

Potable water shall be provided in all places of employment, for drinking, washing of the person, cooking, washing of foods, washing of cooking or eating utensils, washing of food preparation or processing premises, and personal service rooms.

1910.141(b)(1)(iii)

Portable drinking water dispensers shall be designed, constructed, and serviced so that sanitary conditions are maintained, shall be capable of being closed, and shall be equipped with a tap.

1910.141(b)(1)(v)

Open containers such as barrels, pails, or tanks for drinking water from which the water must be dipped or poured, whether or not they are fitted with a cover, are prohibited.

1910.141(b)(1)(vi)

A common drinking cup and other common utensils are prohibited.

1910.141(b)(2) Nonpotable water.

1910.141(b)(2)(i)

Outlets for nonpotable water, such as water for industrial or firefighting purposes, shall be posted or otherwise marked in a manner that will indicate clearly that the water is unsafe and is not to be used for drinking, washing of the person, cooking, washing of food, washing of cooking or eating utensils, washing of food preparation or processing premises, or personal service rooms, or for washing clothes.

1910.141(b)(2)(ii)

Construction of nonpotable water systems or systems carrying any other nonpotable substance shall be such as to prevent backflow or back siphoning into a potable water system.

1910.141(b)(2)(iii)

Nonpotable water shall not be used for washing any portion of the person, cooking or eating utensils, or clothing. Nonpotable water may be used for cleaning work premises, other than food processing and preparation premises and personal service rooms: Provided, that this nonpotable water does not contain concentrations of chemicals, fecal coliform, or other substances which could create unsanitary conditions or be harmful to employees.

B.3 AWWA Standard C651

This standard presents essential procedures for disinfecting new and repaired water mains. Topics covered include forms of chlorine disinfection, a description of the disinfection procedure, preventive and corrective measures during construction, methods of chlorination, final flushing, bacteriological testing, repeated disinfection, final connections to existing mains, disinfection procedures when cutting into or repairing existing mains, and special procedures for caulked tapping sleeves. Appendices cover chlorine residual testing and disposal of heavily chlorinated water.

B.4 Ohio EPA Operations Policy OPR–05–002 - Disinfection of Finished Water Storage Facilities & Water Mains

AWWA Standards for the disinfection of finished water storage facilities and water mains, which are referenced in rule 3745–83–01 of the Ohio Administrative Code (OAC) are explained in this document. The intent of this policy is to achieve consistent application of these standards throughout the state.

Disinfection of finished water storage facilities and water mains – OAC rule 3745-83-01 (C)(5) and (C)(6).

APPENDIX C.—WATER ANALYSIS SCHEDULE

C.1 LF Procedure

Water quality is verified by annual sampling and testing. Drinking water shall be sampled and tested at specific end use fixtures on an annual basis. Each sample is analyzed for chlorine, turbidity, pH, iron, zinc, copper, lead, and fecal coliforms. Sampling locations are based on occupant density, with annual even year testing occurring at Building142, Building 21, Building 86, Building 77, Building 5, and Building 60 and odd year testing occurring at Building 6, Building 14, Building 54, Building 49, Building 301, Building 11, and Building 107. Three additional building will be tested each year, as determined by the EEMO. EEMO determines the location and number of fixtures to be sampled at random based on statistical analysis techniques.

FD implements the annual water quality sampling, testing and analysis for the Drinking Water Program. The samples are collected at point of use fixtures across LF. Samples are collected by the maintenance contractor and delivered to a facility approved by the Ohio EPA Division of Environmental Services Laboratory Certification Section for testing and analyses. These results are delivered to FD and FE for record keeping. Samples that do not meet acceptable water quality standards require additional sampling and testing to determine the source of water quality issue.

C.2 PBS Procedure

The nature of the water distribution system (long piping runs and relatively little use) at PBS requires more frequent and widespread water quality testing.

- A water sample is collected annually from all active drinking water fountains and analyzed as appropriate for compliance with primary and secondary drinking water standards.
- Each sample is analyzed for free and total chlorine, chromium (total), copper, iron, lead, odor, pH, and zinc.
- Based on analytical results, the source remains in service or is tagged out of service pending further analysis.
- Corrective action is taken as necessary; that is, lines are flushed and the source repeatedly analyzed until the source is able to maintain compliance with the drinking water standards.
- If a source is unable to meet the drinking water standards, an alternative water supply is used until the cause of the contamination is identified and corrected.

C.2.1 Total Coliform Rule Analysis

Six water samples are also collected semi-annually and analyzed for free and total chlorine. Samples are also sent to an Ohio EPA certified laboratory for Total Coliform Rule analysis. Three are from the same locations and three are from random locations. Results are sent to the Plum Brook Chemistry Lab Technician. If coliforms are present in the samples, the offsite laboratory notifies the Chemistry Lab Technician. The location is tagged out of service and additional samples are collected and sent offsite for analysis. This is completed until results are negative for 2 consecutive days. Once this occurs, the out of service tag is removed and the water supply is put back into service.